REMARKS

The present application stands with the abstract of the disclosure objected to as being longer than the specified 150-word length. The abstract has been amended above. The disclosure was objected to because of an embedded hyperlink. The hyperlink has been deleted above. The disclosure was also objected to because of several noted informalities. These have been attended to by the above amendments made to specification.

Various claims have been rejected under 35 U.S.C. §102(b) as being anticipated by the cited Birrell et al. (Birrell) reference patent, under 35 U.S.C. §102(e) as being anticipated by the cited Bendinelli et al. (Bendinelli) reference patent, under 35 U.S.C. §102(e) as being anticipated by the cited Brustoloni et al. (Brustoloni) published patent application. Various dependent claims have also been rejected under 35 U.S.C. §103 as being obvious over Bendinelli in view of the cited Rabenko et al. (Rabenko) reference patent, over Birrell in view of the cited Capurka et al. (Capurka) reference patent, and Bendinelli, Rabenko, and the cited Ogier et al. (Ogier) reference publication. For the reasons below, the amended claims above are believed to be neither anticipated by nor obvious over any of the cited references or any combination thereof.

Applicant's present invention advantageously eliminates or provides automatic recovery from race conditions and collisions in a NAT implementing a heuristic methodology, such as VPN Masquerade, to translate packet addresses and/or port numbers. In accordance with the invention, <u>after</u> a secure tunnel that traverses such a NAT has been created over a packet network between two endpoints using a <u>protocol that is independent of</u> whatever endpoint <u>applications</u> are running on the endpoints, a control packet is then sent from the first endpoint to the second endpoint <u>before any packets containing application data</u> are sent between the two endpoints. No packets containing application data are sent between the endpoints until a responsive control packet is received back at the

first endpoint from the second endpoint. This ensures the connectivity of the two endpoints through the tunnel.

In the Birrell patent, the word "tunnel" is applied to a <u>node</u>, not a protected, authenticated, encrypted <u>virtual link</u> between two endpoints, as per the "tunnel" described in applicant's specification, and as the word "tunnel" is commonly used in the art. The "tunnel" in Birrell is thus not comparable with applicant's "tunnel". Also, in Birrell, the applications running on the endpoints cannot run independent of the protocol running between the endpoints, but must be aware of that protocol in order to operate in accordance with the described method. Birrell discloses no tunnel traversing a "NAT implementing a heuristic methodology", does not disclose sending a control packet from one endpoint <u>after a tunnel has been created</u>, and <u>waiting until a responsive packet is received</u> before sending any packets containing application data, as per applicant's amended independent claims 1 and 18.

In the Bendinelli patent, a <u>tunnel between endpoints</u> is not disclosed. Rather, what are described are <u>tunnels between gateways</u> to different LANs. Bendinelli describes what happens <u>before a tunnel exists</u>, and describes a process for <u>creating</u> a tunnel. Applicant's claimed invention is directed to ensuring end-to-end connectivity between endpoints <u>after a tunnel between the endpoints has been created</u>. Bendinelli clearly doesn't anticipate applicant's amended independent claims 1 and 18, which describe a methodology that is performed <u>after a tunnel has been created</u>.

The Brustoloni publication discloses a system in which after a tunnel is created between a user and a micro service provider, a contract is established between the endpoints. What is transmitted between the user and the micro service provider after the tunnel is created is <u>application data</u> (i.e., the information necessary the data to establish the contract). There is nothing in Brustoloni that suggests <u>waiting</u> to send application data <u>until a control packet</u> is <u>sent</u> from a first endpoint to the second and a responsive control packet is received from the second endpoint by the first endpoint. Applicant's current claimed invention in independent claims 1 and 18 is neither disclosed nor

obvious over his prior co-invented invention. Accordingly, an affidavit/declaration under 37 CFR 1.132 or 37 CFR 1.131 does not appear to be necessary.
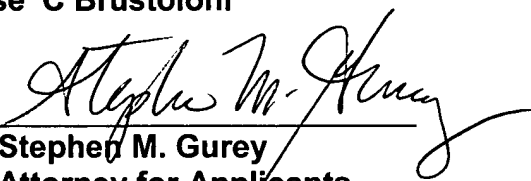
The added recitations in amended claims 1 and 18 of "after a secure tunnel has been created between a first endpoint and a second endpoint on a packet network which tunnel traverses at least one network address translator (NAT) that implements a heuristic methodology in translating addresses and/or port numbers, and which tunnel is operating under a secure protocol that is independent of whatever applications are running on the first and second endpoints, and before one or more packets containing application data are sent between the first and second endpoints" in combination with the slightly amended original recitation of "sending a control packet from the first endpoint of the tunnel through the tunnel to the second endpoint of the tunnel" and the amended recitation of "waiting at the first endpoint for a responsive control packet through the tunnel from the second endpoint before sending packets containing application data through the tunnel" are clearly not anticipated by the Birrell, the Bendinelli, or the Brustoloni references. Accordingly, amended claims 1 and 18 are allowable over these references. Inasmuch as the other cited references were applied to the dependent claims, a detailed analysis of each reference does not appear to be warranted and the dependent claims of the present application, being dependent on what are believed to be now allowable independent claims, should also now be allowable.

In view of the foregoing, allowance of all the claims presently in the application and passage to issue of the subject application is respectfully requested. If the Examiner should feel that the application is not yet in a condition for allowance and that a telephone interview would be useful, he is invited to contact applicants' undersigned attorney at 973, 386-8252.

Respectfully submitted,

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